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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,792	03/06/2002	Louis P. Huber	P04870US1	9696

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EXAMINER

PHAN, THIEM D

ART UNIT PAPER NUMBER

3729

DATE MAILED: 11/14/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/091,792

Applicant(s)

HUBER ET AL.

Examiner

Tim Phan

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. The amendment filed in Paper No. 5 (filed 9/11/03) has been fully considered and made of record.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 33 is rejected under 35 U.S.C. 102(b) as being anticipated by Wellard (US 4,267,634) hereinafter '634.

As applied to claim 33, the '634 teaches a method for making chip component, comprising:

- separating a first chip or thick film resistor (Ch. Fig. 3, element 15) from a second chip or thick film resistor (Ch. Fig. 3, element 15) with a glass or ceramic encapsulant (Cf. Fig. 3, element 13), where each chip resistor comprising a substrate (Cf. Fig. 2, element 13), a resistive element (Cf. Fig. 2, element 15) on the substrate, and first and second end caps electrically connected to opposite ends of the resistive elements (Cf. Fig. 7, elements 27 & 29);

- connecting the first end cap of the first chip resistor to a first end cap of the second chip resistor with a first metal barrier (Cf. Fig. 7, element 27; column 4, lines 11-13) for mechanical strength and electrical conductivity;
- connecting the second end cap of the first chip resistor to a second end cap of the second chip resistor with a second metal barrier (Cf. Fig. 7, element 27; column 4, lines 11-13), for mechanical strength and electrical conductivity.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over the '634.

As applied to claims 34 and 35, the '634 teaches the claimed invention except for using alumina for substrate and ruthenium oxide for resistive element.

It would have been an obvious matter of design choice to use alumina for substrate and ruthenium oxide for resistive element, since applicants have disclosed that other types of material may be used for the resistive element and the substrate (Cf. Applicants' disclosure, page 4, last

sentence) and it appears that the invention would perform equally well with ceramic material as substrate (Cf. column 2, line 38) and any conductive material with determinable impedance for resistive material (CF. column 2, lines 59-61).

As applied to claim 36, the '634 teaches the claimed invention except for having the chip resistor of standard size of approximately 0.250 inches in length.

It would have been an obvious matter of design choice to have the chip resistor of standard size of approximately 0.250 inches in length, since applicants has disclosed that the sizes for thickness and length are given by way of example only (Cf. Applicants' disclosure, page 6, lines 25-27) and it appears that the invention would perform equally well the finished material being then diced or cut into tiny chips (Cf. Fig. 5, element 19; column 1, line 13; column 3, line 20).

As applied to claim 37, the '634 teaches the claimed invention except for using nickel plating due to its high specific heat capacity (Cf. Applicants' disclosure, page 5, last paragraph) as metal barrier. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use nickel plating as metal barrier since it is known in the art that palladium-silver with similar high melting temperature as nickel is deposited as metal barrier on both ends of the chip (Cf. column 3, lines 47-50).

Response to Arguments

6. Applicants' arguments with respect to cancelled claims 26-32 and new claims 33-37 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 3729

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Phan whose telephone number is 703-605-0707. The examiner can normally be reached on Monday - Friday, 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter VO can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

TP

Tim Phan
Examiner
Art Unit 3729

CJA
CARL J. ARBES
PRIMARY EXAMINER

CARL J. ARBES
PRIMARY EXAMINER

tp
November 12, 2003